UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,997	08/01/2006	Andreas Eipper	12810-00334-US1	4348

30678 7590 03/28/2012

CONNOLLY BOVE LODGE & HUTZ LLP
1875 EYE STREET, N.W.
SUITE 1100
WASHINGTON, DC 20006

EXAMINER	
LEE, DORIS L	

ART UNIT	PAPER NUMBER
1764	

MAIL DATE	DELIVERY MODE
03/28/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

RECORD OF ORAL HEARING

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS

AND INTERFERENCES

Ex parte ANDREAS EIPPER, BERND BRUCHMANN, DIETRICH SCHERZER, JEAN-FRANCOIS STUMBE, CARSTEN WEISS, and FREDDY GRUBER

Appeal 2012-000150
Application 10/587,997
Technology Center 1700

Oral Hearing Held: Thursday, March 8, 2012

Before CATHERINE TIMM, BEVERLY A. FRANKLIN (via video), RAE LYNN P. GUEST, Administrative Patent Judges

ON BEHALF OF THE APPELLANT:

BURTON A. AMERNICK, ESQ.
Connolly, Bove, Lodge & Hutz, LLP
1875 I Street, N.W., Suite 1100
Washington, D.C. 20006

The above-entitled matter came on for hearing on Thursday, March 8, 2012, commencing at 3:05 p.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, 9th Floor, Alexandria, Virginia, before Jennifer M. O'Connor, Notary Public.

THE CLERK: Calendar number 41, Appeal No. 2012-000150, Mr. Amernick.

JUDGE TIMM: Thank you. Welcome, Mr. Amernick.

MR. AMERNICK: Good afternoon, Your Honors.

JUDGE TIMM: If you have a business card that you can give our court reporter, that would be appreciated.

MR. AMERNICK: Yes, I do.

JUDGE TIMM: And as you can see, one of our members is here electronically.

MR. AMERNICK: Yes.

JUDGE TIMM: There's a camera in the back so she can see you. Also, you can assume that we understand the issues in the case, and proceed from there. You have 20 minutes.

MR. AMERNICK: Okay. Since you understand the issues in the case, I'll just jump right to it. We've spoken before in a similar application. The place where we deviate from the prior art relates to particular types of highly branched or hyperbranched polycarbonates. And in this application, the claims are very limited as to the type of hyperbranched polycarbonate. It's limited with respect to range of hydroxyl

number, limited with respect to degree of branching to further define the additive that's incorporated in the composition.

In addition, the claims recite that there is non-uniformity with respect to the chains in the polymer. The important part of the invention is that we achieve good fluidity, along with maintaining physical properties that are necessary for molding a composition. And one part I'll point to in the specification at page 28, lines 1 to 3 speak about that the compositions can be processed without clumping or caking, thereby resulting in thin-walled moldings, such as nano moldings.

With respect to the prior art, again, the primary reference does not disclose the addition of the particular polycarbonate that's employed. That's how we deviate from the prior art. Secondary reference relied upon by the examiner does talk about highly branched -- hyperbranched polymers; included among their list of polymers is mention of a polycarbonate.

In order to combine the references, the examiner has relied upon a number of very generalized statements in the secondary reference. To begin with, the reference makes a suggestion of adding polymers to thermoplastic polymers. Does not specifically mention polyesters, as required by the present invention.

Furthermore, because there's a list of types of polymers, there's no identification which one one would pick out of the group. In addition to polycarbon -- polycarbonates, we mentioned in the reference polyamides, polyesters, polyureas, polyurethanes, and among those polymers, there is a wide range of characteristics and properties. Looking at the examples, we go from liquids to solids, to sticky solids, and the one example that relates to

the polycarbonates is a gum, which does not seem like a suitable physical characteristic for purposes of the invention, which happened to be, again, this combination of fluidity of the composition along with the mechanical properties.

This application, as contrasted to the one we previously spoke about, you've decided on, has data to demonstrate the surprising and improved results achieved by the invention. And if we can, we can jump to that data and just briefly speak about it. Table 3 on page 32 of the specification shows that it's a -- there's a comparison in there where you add a relatively small amount of the polycarbonate within the scope of the invention, as contrasted to a composition which is referred to as comparison composition 1C, which does not contain that component. And by looking at the melt volume rate as well as the flow spiral, there's significantly improved characteristics.

In addition, the -- certain mechanical properties, such as elasticity and stress, are maintained with respect to that type of comparison. Likewise, similar results can be found in table 3, comparing example 2C to examples 5 and 6. With respect to the data, the examiner seems to have discounted the data, based on the comment made on page 11 of the examiner's answer, where it was mentioned that in table 1, which is on page 31 of the specification, that comparative example 2C had a higher melt volume rate than example 6. And that's absolutely true. However, that comparison of comparison example 2C to example 6 is really not a head-to-head comparison, because example 6 includes a significant amount, 30 percent, of the -- an auxiliary component, which is glass fibers, whereas

example 2C does not include it. So there will be a different effect due to the presence of that component.

The better comparison in table 1 would be between example 6 and example 1C, where there is no -- where there is the glass fibers that are present. And that comparison will show that, again, significantly improved melt volume rate, flow rate, and again, certain of the physical properties are very comparable.

With respect to a comparison of example 2C, the better comparison there -- I guess the better comparison there is, I think, example 1 with respect to that.

JUDGE GUEST: The examiner also says something about the data not being commensurate with the scope of the claims, and especially with respect to the percentage of the A component, because it only goes -- you only have examples here going down to about 67 percent, and your claim goes all the way down to 10 percent. That's particularly relevant if you look at -- if you compare example 1 and example 6, you see a very dramatic reduction in that MVR value when you start adding a lot more of that C component. So if you could speak to that.

MR. AMERNICK: Yes. With respect to whether or not commensurate in scope -- getting back to the fact that the references themselves relied upon do not give any indication as to how much of -- and especially speaking about the secondary reference, how much of any of those polymers one would use if it were to be added to another polymeric material.

So the comparisons that are in the application do show some very, very low amounts. We have 1 percent of the additive where we deviate from the prior art and we go all the way up to, I think, about 4 percent or so. So it's really down at that low range, which is probably the closest thing to the prior art, which has zero. So because the art doesn't really show anything about the ranges, it would seem that being down at the low end is closer to the prior art than if we were to have examples up at the higher end.

In addition, I'll mention -- which was mentioned in the reply brief -- is that reference in the reply brief was made to some additional comparative tests that were carried out that were presented in the related prosecution of European application. And those tests show the addition of a small amount of a polycarbonate, but not the type of hyperbranched polycarbonates that are within the scope of the invention, but polycarbonates that are referred to as dendritic polycarbonates. And again, the comparison of the results with respect to flowability, mechanical properties, significantly improved by using those types of polycarbonates.

And I'll mention one other comment that was made in the examiner's answer about motivation to combine the references. The motivation -- and this is on page 5, lines 13 to 14 -- was referred to as the fact that both references are related to additives for thermoplastics. Again, my own opinion, I think that's too broad of a scope to find motivation. And in reality, I would say that the two references are not really related or concerned with looking for additives for thermoplastics.

The primary reference, Gareiss, is related to an additive that's provided in a thermoplastic polyester in order to achieve flame-proofing. There's nothing discussed there about fluidity. The secondary reference, the British patent to Davies, is related to processes for preparing what they refer to as hyperbranched polymers. And again, although they make some generalized statements about what these polymers can be used for, the focus of that is really not as far as additives are concerned.

JUDGE GUEST: The examiner does mention that the secondary reference to just using the -- well, it teaches really using any of these hyperbranched polymers as a plasticizer in a thermoplastic composition, and the Gareiss reference does include plasticizers as possible additives.

MR. AMERNICK: And that's correct. But which one would you select? Would you select the ones that are liquids? Would you select the solids? Would you select the sticky solids or the polycarbonate one, which is a gum? I would be pretty surprised if the whole range of very different physical characteristics of polymers within the context of the secondary reference, as well as the wide range of chemical differences between polycarbonates, polyesters, polyamides, polyureas, polyurethanes, would all function as a plasticizer. And it also talks about reactive plasticizers, and whether or not you want to add a reactive plasticizer to the -- you know, to the thermoplastic polyester was certainly another question.

Getting to example 5 in the secondary reference to Davies, which is the only one that prepares the polycarbonate, they have these

ending groups, which are these imidazolide groups . And those are somewhat unstable. And if you look to -- it doesn't say it in example five, but if you look to example eight in the British patent, it actually mentions those groups as end groups and talks about the fact that there's going to start to be a conversion of those groups due to hydrolysis just with moisture that may be around.

So those things are really not that suitable to even start thinking about adding it to compositions.

JUDGE GUEST: But it also mentions that those imidazolide groups can be reacted -- subsequently reacted, and they become carbonates.

MR. AMERNICK: They could be subsequently reacted; that's certainly correct.

JUDGE GUEST: In which case, how would that distinguish from your invention if you had --

MR. AMERNICK: Well, first of all, they didn't subsequently react them. Whether or not you start with this gum and decide to react it with something else and how it affects the properties, I don't really know, myself.

JUDGE TIMM: Judge Franklin, do you have any question?

JUDGE FRANKLIN: No, no questions.

JUDGE TIMM: Judge Guest?

JUDGE GUEST: No.

JUDGE TIMM: Okay, I think we understand your position.

MR. AMERNICK: Okay. Well, thank you very much. I appreciate the time, and I appreciate your consideration.

JUDGE TIMM: Thank you for coming in.

MR. AMERNICK: My pleasure.

(Whereupon, at 3:22 p.m., the proceedings were concluded.)

* * * * *